L8: Entry 9 of 13 File: USPT May 16, 2000

DOCUMENT-IDENTIFIER: US 6063628 A
** See image for Certificate of Correction **
TITLE: Induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA

Brief Summary Text (6):
There are a number of other chronic persistent diseases caused by RNA or DNA viruses that replicate through an RNA intermediate which are equally difficult to treat. Among the candidate human viral diseases are hepatitis B and C, T-cell human leukemia as well as other diseases. Important RNA viral diseases of animals include feline leukemia and immunodeficiency, Visna maedi of sheep, equine infectious anemia, caprine arthritis encephalitis and bovine leukemia. Even though the viruses that are associated with these diseases are replicated by an RNA dependent DNA polymerase, the RNA genomes are synthesized by the mammalian RNA polymerase.

Other Reference Publication (1):
Halle, S., 5-Azacytidine as a Mutagen for Arboviruses, Journal of Virology, 2(10): 1228-1229, (Oct. 1968).

Other Reference Publication (2):
Pringle, C.R., Genetic Characteristics of Conditional Lethal Mutants of Vesicular Stomatitis Virus Induced by 5-Fluorouracil, 5-Azacytidine, and Ethyl Methane Sulfonate, Journal of Virology, 5(5):559-567, (May 1970).

CLAIMS:

1. A method of increasing the mutation rate of a virus, comprising administering an RNA nucleoside analog to a virally infected cell, wherein the analog is incorporated by a polymerase into an RNA copy of a genomic nucleic acid encoding the virus, said analog replacing a first natural occurring nucleotide having a first complementary nucleotide wherein said analog complements a second nucleotide which is other than the first nucleotide, thereby inducing the virus to mutate.

9. The method of claim 1, wherein the method further includes the proviso that if the virus is HIV, then the RNA nucleoside analog is not HEPT or a 2',5'-bis-O-silylated-3'-spiro-substituted (TSAO) adenine, hypoxanthine, N.sup.1 -alkyl-hypoxanthine, or xanthine or a nucleoside analog that is incorporated and extended at high efficiency by reverse transcriptase of HIV.

11. The method of claim 1, wherein the virus is a retrovirus.

15. The method of claim 1, wherein increasing the mutation rate of the virus produces a progressive loss of viability of the virus.

17. The method of claim 1, wherein the virus is an RNA virus selected from the group consisting of hepatitis C, coronavirus, influenza, respiratory syncytial virus and dengue fever.

22. A method of increasing the mutation rate of a virus, comprising administering a free base selected from the group comprising adenine, cytosine, guanine, uracil and thymine to a virally infected cell, wherein the base is incorporated by a polymerase into an RNA or DNA copy of a genomic nucleic acid encoding the virus, said base replacing a first natural occurring nucleotide having a first complementary nucleotide wherein said base complements a second nucleotide which is other than the first nucleotide, thereby inducing the virus to mutate.

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     (FILE 'HOME' ENTERED AT 14:41:35 ON 27 JUN 2003)

     FILE 'MEDLINE' ENTERED AT 14:41:43 ON 27 JUN 2003
L1             0 S EQUINE ABORTION VIRUS AND TEMPERATURE SENSITIVE
L2             0 S EQUINE HERPES VIRUS AND TEMPERATURE SENSITIVE
L3             5 S EQUINE HERPESVIRUS AND TEMPERATURE SENSITIVE
               E PATEL J R/AU
L4            72 S E3
L5             6 S L4 AND EQUINE
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L5 ANSWER 1 OF 6 MEDLINE
AN 2002726456 MEDLINE
DN 22377043 PubMed ID: 12488066
TI Equid herpesvirus (EHV-1) live vaccine strain C147: efficacy against respiratory diseases following EHV types 1 and 4 challenges.
AU **Patel J R**; Foldi J; Bateman H; Williams J; Didlick S; Stark R
CS Intervet UK Ltd., The Elms, Thicket Road, Houghton, Huntingdon PE28 2BQ, Cambridgeshire, UK.. jay.patel@intervet.com
SO VETERINARY MICROBIOLOGY, (2003 Mar 20) 92 (1-2) 1-17.
Journal code: 7705469. ISSN: 0378-1135.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200304
ED Entered STN: 20021219
Last Updated on STN: 20030406
Entered Medline: 20030404
AB The temperature sensitive and host range mutant clone 147 of **equine** herpesvirus 1 (EHV-1) was assessed for its ability to protect conventional, susceptible adult horses against respiratory infection by EHV-1 and **equine** herpesvirus 4 (EHV-4).Intranasal (IN) vaccination with 5.2 log(10) TCID(50) did not cause adverse clinical reactions although a limited virus shedding and viraemia (leukocytes) was observed in 11 of 15 and 10 of 15 vaccinated horses respectively. All 15 vaccinated horses showed a significant seroresponse to both EHV-1 and EHV-4 for virus neutralising (VN) antibody. None of 14 control horses shed virus or became viraemic or seroconverted prior to challenge. EHV-1 challenge (dose 6.0 log(10)) 6 weeks after vaccination resulted in pyrexia in all eight control horses while eight vaccinated horses remained unaffected. Six control horses developed nasal discharge, five of which were mucopurulent nasal discharge (mean duration 3.2 days) which also occurred in four vaccinated horses for 1 day. All eight control horses shed challenge EHV-1 at a significantly higher level (group mean titre 2.6+/-0.4 log(10) TCID(50) per sample) and for much longer (mean duration 4.8+/-1.5 days) than that (group mean titre 1.4+/-0.8 log(10) TCID(50) per sample and mean duration 1.5+/-0.5 days) in six vaccinated horses. Furthermore, all eight control horses became viraemic (mean duration 2.9 days) but viraemia did not occur in eight vaccinated horses. Following EHV-1 challenge, all eight control horses showed a significant VN antibody rise to both EHV-1 and EHV-4 but this occurred in only one vaccinated horse and to EHV-4 only. In EHV-4 challenge (dose of 4.2 log(10) TCID(50)) of a separate pair of seven vaccinated and six control horses, 6 weeks after EHV-1 vaccination resulted in pyrexia (mean duration 2.3 days) and nasal discharge (mean duration 1.8 days) in three and five control horses respectively but the only reaction observed in the vaccinated group was nasal discharge for 1 day in one animal. All six control animals shed virus (mean titre 2.5+/-0.6 log(10) TCID(50) per sample and mean duration 2+/-0.6 days) compared to one vaccinated animal. Although EHV-4 viraemia is rare, 3 of 6 control horses became viraemic after EHV-4 challenge but this was not observed in vaccinated horses. After EHV-4 challenge 3 and 5 of 6 control horses seroconverted for VN antibody to EHV-1 and EHV-4 respectively; a non-responsive control horse had high level of pre-existing VN antibody to EHV-4. However, only 1 of 7 vaccinated horses showed a significant antibody rise and only to EHV-4.
CT Check Tags: Animal; Female; Male
Administration, Intranasal
Antibodies, Viral: BL, blood
Herpesviridae Infections: IM, immunology
Herpesviridae Infections: PC, prevention & control
*Herpesviridae Infections: VE, veterinary

Herpesviridae Infections: VI, virology
*Herpesvirus 1, Equid: IM, immunology
Herpesvirus 1, Equid: PH, physiology
*Herpesvirus 4, Equid: IM, immunology
Herpesvirus 4, Equid: PH, physiology
Herpesvirus Vaccines: AD, administration & dosage
Herpesvirus Vaccines: IM, immunology
Herpesvirus Vaccines: ST, standards
Horse Diseases: IM, immunology
Horse Diseases: PC, prevention & control
*Horse Diseases: VI, virology
Horses
Neutralization Tests: VE, veterinary
Respiratory Tract Diseases: IM, immunology
Respiratory Tract Diseases: PC, prevention & control
*Respiratory Tract Diseases: VE, veterinary
Respiratory Tract Diseases: VI, virology
Vaccination: MT, methods
*Vaccination: VE, veterinary
Viremia: VE, veterinary
Virus Replication: PH, physiology
Virus Shedding: IM, immunology
CN 0 (Antibodies, Viral); 0 (Herpesvirus Vaccines)

L5 ANSWER 2 OF 6 MEDLINE
AN 2002681336 MEDLINE
DN 22329663 PubMed ID: 12441229
TI Derivation and characterisation of a live equid herpes virus-1 (EHV-1) vaccine to protect against abortion and respiratory disease due to EHV-1.
AU **Patel J R**; Bateman H; Williams J; Didlick S
CS Intervet UK Ltd., The Elms, Thicket Road, Houghton, Huntingdon, Cambridgeshire PE28 2BQ, UK.. jay.patel@intervet.com
SO VETERINARY MICROBIOLOGY, (2003 Jan 2) 91 (1) 23-39.
Journal code: 7705469. ISSN: 0378-1135.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200303
ED Entered STN: 20021121
Last Updated on STN: 20030314
Entered Medline: 20030313
AB A German abortion isolate of EHV-1 (strain M8) was grown in **equine** dermal (ED) cells at a low multiplicity of infection in presence of 5-bromo-2-deoxy uridine. The resulting stock was dialysed, titrated and cloned by terminal dilution in ED cells grown in 96-well microtitration plates. Of 192 clones each originating from a single focus, clone 147 (C147) was found to be restricted for growth at and above temperatures of 38.5 degrees C. It was also restricted for growth at 37 degrees C in rabbit kidney (RK-13) cells which are widely used for the isolation and titration of EHV-1; hence clone 147 was EHV-4-like.Clone 147 showed a remarkable efficacy as a vaccine in protecting conventional pregnant Welsh Mountain pony mares against abortions due to EHV-1. A single intranasal (IN) vaccination protected five out of six (83.3%), and four out of five (80%) of mares upon challenge 4 and 5-6 months, respectively, after the immunisation, whereas all six unvaccinated mares aborted between 9 and 19 days after IN EHV-1 challenge. With the exception of the day 9 abortion, foetuses of the remaining five mares were EHV-1 infected. Placenta from the early aborting mare was, however, EHV-1 positive. Both groups of vaccinated mares were also significantly protected against clinical reaction (notably pyrexia), nasal shedding and viraemia following challenge infection.

CT Check Tags: Animal; Female
*Abortion, Veterinary: IM, immunology
Abortion, Veterinary: PC, prevention & control
Abortion, Veterinary: VI, virology
Antibodies, Viral: BL, blood
Cloning, Molecular: MT, methods
Herpesviridae Infections: IM, immunology
Herpesviridae Infections: PC, prevention & control
*Herpesviridae Infections: VE, veterinary
Herpesviridae Infections: VI, virology
Herpesvirus 1, Equid: GD, growth & development
*Herpesvirus 1, Equid: IM, immunology
Horse Diseases: IM, immunology

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Search Results - Record(s) 1 through 8 of 8 returned.

☐ 1. Document ID: US 6207166 B1

L2: Entry 1 of 8 File: USPT Mar 27, 2001

US-PAT-NO: 6207166
DOCUMENT-IDENTIFIER: US 6207166 B1
**** See image for Certificate of Correction ****

TITLE: Polynucleotide formulation against pathologies of the horse

DATE-ISSUED: March 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Audonnet; Jean-Christophe	Lyons			FR
Bouchardon; Annabelle	Lyons			FR
Riviere; Michel	Ecully			FR

US-CL-CURRENT: 424/199.1; 424/202.1, 424/204.1, 424/209.1, 435/320.1, 536/23.72

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc | Image

☐ 2. Document ID: US 5084271 A

L2: Entry 2 of 8 File: USPT Jan 28, 1992

US-PAT-NO: 5084271
DOCUMENT-IDENTIFIER: US 5084271 A
**** See image for Certificate of Correction ****
**** See image for Reexamination Certificate ****

TITLE: Vaccine for equine herpesvirus

DATE-ISSUED: January 28, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Studdert; Michael J.	Balwyn, Victoria 3103			AU

US-CL-CURRENT: 424/229.1; 424/278.1, 424/820

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc | Image

☐ 3. Document ID: US 4911910 A

L2: Entry 3 of 8 File: USPT Mar 27, 1990

US-PAT-NO: 4911910
DOCUMENT-IDENTIFIER: US 4911910 A
**** See image for Certificate of Correction ****

TITLE: Purified equine immunologlobulins and method of use thereof

DATE-ISSUED: March 27, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mifflin; Raymond E.	Germantown	MD		

US-CL-CURRENT: 424/159.1; 424/165.1, 424/167.1, 530/389.1, 530/389.4, 530/389.5, 530/416

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 4. Document ID: US 4855283 A

L2: Entry 4 of 8 File: USPT Aug 8, 1989

US-PAT-NO: 4855283
DOCUMENT-IDENTIFIER: US 4855283 A

TITLE: Novel pharmaceutically active N-(2-aminoacylamido-2-deoxy-hexosyl)-amides, -carbamates and -ureas

DATE-ISSUED: August 8, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lockhoff; Oswald	Cologne			DE
Hayauchi; Yutaka	Leverkusen			DE
Stadler; Peter	Haan			DE
Stunkel; Klaus G.	Wuppertal			DE
Streissle; Gert	Wuppertal			DE
Paessens; Arnold	Haan			DE
Klimetzek; Volker	Velbert-Toenisheide			DE
Zeiler; Hans-Joachim	Velbert			DE
Metzger; Karl G.	Wuppertal			DE
Kroll; Hein-Peter	Wuppertal			DE
Brunner; Helmut	Langenfeld			DE
Schaller; Klaus	Wuppertal			DE

US-CL-CURRENT: 424/278.1; 514/25, 514/8, 530/322, 536/17.9

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 5. Document ID: US 4652580 A

L2: Entry 5 of 8 File: USPT Mar 24, 1987

US-PAT-NO: 4652580
DOCUMENT-IDENTIFIER: US 4652580 A

TITLE: Application of azolylmethyloxiranes for the treatment of viral diseases

DATE-ISSUED: March 24, 1987

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Janssen; Bernd	Ludwigshafen			DE
Karbach; Stefan	Ludwigshafen			DE
Meyer; Norbert	Ladenburg			DE
Laur; Gerhard	Mannheim			DE

US-CL-CURRENT: 514/383; 514/397

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

☐ 6. Document ID: US 4110433 A

L2: Entry 6 of 8 File: USPT Aug 29, 1978

US-PAT-NO: 4110433
DOCUMENT-IDENTIFIER: US 4110433 A

TITLE: Equine Rhinopneumonitis Virus

DATE-ISSUED: August 29, 1978

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Purdy, III; Charles W.	St. Joseph	MO		

US-CL-CURRENT: 424/229.1; 424/820, 435/237

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

☐ 7. Document ID: US 4083958 A

L2: Entry 7 of 8 File: USPT Apr 11, 1978

US-PAT-NO: 4083958
DOCUMENT-IDENTIFIER: US 4083958 A

TITLE: Inactivated equine rhinopneumonitis virus vaccine and use thereof

DATE-ISSUED: April 11, 1978

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bryans; John T.	Lexington	KY		

US-CL-CURRENT: 424/229.1; 424/820, 435/238

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 8. Document ID: US 3725542 A

L2: Entry 8 of 8 File: USPT Apr 3, 1973

US-PAT-NO: 3725542
DOCUMENT-IDENTIFIER: US 3725542 A

TITLE: INTRAMUSCULAR VACCINATION PROGRAM AND VACCINE AGAINST RHINOPNEUMONITIS AND PROCESS FOR PREPARING IT

DATE-ISSUED: April 3, 1973

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mayr; Anton	Munich			DT
Wagener; Kurt	Hannover			DT
Pette, deceased; Johann Ditrich Adolf Heinrich	Munich			DT
Petzoldt; Klaus	Freiburg/Breisgau			DT

US-CL-CURRENT: 424/229.1; 424/820, 435/237

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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Terms	Documents
Rhinopneumonitis.clm.	8

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WEST Search History

DATE: Friday, June 27, 2003

Set Name side by side	Query	Hit Count	Set Name result set
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L7	Boxall R J.in.	0	L7
L6	Rhinopneumonitis and Boxall	0	L6
L5	Rhinopneumonitis	25	L5
DB=USPT; PLUR=YES; OP=ADJ			
L4	Rhinopneumonitis and temperature sensitive.clm.	0	L4
L3	Rhinopneumonitis and temperature sensitive	7	L3
L2	Rhinopneumonitis.clm.	8	L2
L1	Rhinopneumonitis	81	L1

END OF SEARCH HISTORY

WEST Search History

DATE: Friday, June 27, 2003

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L7	Boxall R J.in.	0	L7
L6	Rhinopneumonitis and Boxall	0	L6
L5	Rhinopneumonitis	25	L5
DB=USPT; PLUR=YES; OP=ADJ			
L4	Rhinopneumonitis and temperature sensitive.clm.	0	L4
L3	Rhinopneumonitis and temperature sensitive	7	L3
L2	Rhinopneumonitis.clm.	8	L2
L1	Rhinopneumonitis	81	L1

END OF SEARCH HISTORY

NCBI PubMed National Library of Medicine NLM

PubMed Nucleotide Protein Genome Structure PMC Taxonomy OMIM Bo

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Related Resources

1: Patel JR, Bateman H, Williams J, Didlick S. Related Articles, Links

Derivation and characterisation of a live equid herpes virus-1 (EHV-1) vaccine to protect against abortion and respiratory disease due to EHV-1.
Vet Microbiol. 2003 Jan 2;91(1):23-39.
PMID: 12441229 [PubMed - indexed for MEDLINE]

2: Burki F, Rossmanith W, Nowotny N, Pallan C, Mostl K, Lussy H. Related Articles, Links

Viraemia and abortions are not prevented by two commercial equine herpesvirus-1 vaccines after experimental challenge of horses.
Vet Q. 1990 Apr;12(2):80-6.
PMID: 2163560 [PubMed - indexed for MEDLINE]

3: Burrows R, Goodridge D, Denyer MS. Related Articles, Links

Trials of an inactivated equid herpesvirus 1 vaccine: challenge with a subtype 1 virus.
Vet Rec. 1984 Apr 14;114(15):369-74.
PMID: 6328728 [PubMed - indexed for MEDLINE]

4: Heldens JG, Hannant D, Cullinane AA, Prendergast MJ, Mumford JA, Nelly M, Kydd JH, Weststrate MW, van den Hoven R. Related Articles, Links

Clinical and virological evaluation of the efficacy of an inactivated EHV1 and EHV4 whole virus vaccine (Duvaxyn EHV1,4). Vaccination/challenge experiments in foals and pregnant mares.
Vaccine. 2001 Jul 20;19(30):4307-17.
PMID: 11457558 [PubMed - indexed for MEDLINE]

5: Bryans JT, Allen GP. Related Articles, Links

Application of a chemically inactivated, adjuvanted vaccine to control abortigenic infection of mares by equine herpesvirus I.
Dev Biol Stand. 1982;52:493-8.
PMID: 6299858 [PubMed - indexed for MEDLINE]

6: Patel JR, Foldi J, Bateman H, Williams J, Didlick S, Stark R. Related Articles, Links

Equid herpesvirus (EHV-1) live vaccine strain C147: efficacy against respiratory diseases following EHV types 1 and 4 challenges.
Vet Microbiol. 2003 Mar 20;92(1-2):1-17.
PMID: 12488066 [PubMed - indexed for MEDLINE]

☐ **7:** Schroer U, Lange A, Glatzel P, Ludwig H, Borchers K. Related Articles, Links

[Relevance of infection with equine herpesvirus 1 (EHV-1) in a German thoroughbred stud: vaccination, abortion and diagnosis]
Berl Munch Tierarztl Wochenschr. 2000 Feb;113(2):53-9. German.
PMID: 10726362 [PubMed - indexed for MEDLINE]

☐ **8:** Smith KC, Mumford JA, Lakhani K. Related Articles, Links

A comparison of equid herpesvirus-1 (EHV-1) vascular lesions in the early versus late pregnant equine uterus.
J Comp Pathol. 1996 Apr;114(3):231-47.
PMID: 8762581 [PubMed - indexed for MEDLINE]

☐ **9:** Smith KC, Whitwell KE, Binns MM, Dolby CA, Hannant D, Mumford JA. Related Articles, Links

Abortion of virologically negative foetuses following experimental challenge of pregnant pony mares with equid herpesvirus 1.
Equine Vet J. 1992 Jul;24(4):256-9.
PMID: 1323457 [PubMed - indexed for MEDLINE]

☐ **10:** Frymus T, Kita J, Woyciechowska S, Ganowicz M. Related Articles, Links

Foetal and neonatal foal losses on equine herpesvirus type 1(EHV-1) infected farms before and after EHV-1 vaccination was introduced.
Pol Arch Weter. 1986;26(3-4):7-14.
PMID: 2830601 [PubMed - indexed for MEDLINE]

☐ **11:** Studdert MJ. Related Articles, Links

Vaccination of foals and pregnant mares with Duvaxyn EHV1, 4 vaccine.
Vaccine. 2002 Jan 15;20(7-8):992. No abstract available.
PMID: 11803056 [PubMed - indexed for MEDLINE]

☐ **12:** Fitzpatrick DR, Studdert MJ. Related Articles, Links

Immunologic relationships between equine herpesvirus type 1 (equine abortion virus) and type 4 (equine rhinopneumonitis virus).
Am J Vet Res. 1984 Oct;45(10):1947-52.
PMID: 6208822 [PubMed - indexed for MEDLINE]

☐ **13:** Becker W. Related Articles, Links

[Preventative vaccination against EHV (equine herpesvirus) abortion]
Tierarztl Prax. 1988;16(1):61-3. German.
PMID: 2835828 [PubMed - indexed for MEDLINE]

☐ **14:** Burki F, Nowotny N, Oulehla J, Schmehlik O, Mostl K, Pallan C, Rossmanith E. Related Articles, Links

Attempts to immunoprotect adult horses, specifically pregnant mares, with commercial vaccines against clinical disease induced by equine herpesvirus-1.
Zentralbl Veterinarmed B. 1991 Aug;38(6):432-40.
PMID: 1659067 [PubMed - indexed for MEDLINE]

☐ **15:** Kukreja A, Walker C, Fitzmaurice T, Awan A, Love DN, Whalley JM, Field HJ. Related Articles, Links

Protective effects of equine herpesvirus-1 (EHV-1) glycoprotein B in a murine model of EHV-1-induced abortion.
Vet Microbiol. 1998 Aug 15;62(4):303-11.
PMID: 9791876 [PubMed - indexed for MEDLINE]

☐ **16:** Weiblen R, Rabuske M, Rebelatto MC, Nobre VM, Canabarro TF. Related Articles, Links

Abortion due to equine herpesvirus in southern Brazil.
Braz J Med Biol Res. 1994 Jun;27(6):1317-20.
PMID: 7894345 [PubMed - indexed for MEDLINE]

☐ **17:** Foote CE, Love DN, Gilkerson JR, Whalley JM. Related Articles, Links

Serological responses of mares and weanlings following vaccination with an inactivated whole virus equine herpesvirus 1 and equine herpesvirus 4 vaccine.
Vet Microbiol. 2002 Aug 2;88(1):13-25.
PMID: 12119135 [PubMed - indexed for MEDLINE]

☐ **18:** Edington N, Bridges CG. Related Articles, Links

One way protection between equid herpesvirus 1 and 4 in vivo.
Res Vet Sci. 1990 Mar;48(2):235-9.
PMID: 2159176 [PubMed - indexed for MEDLINE]

☐ **19:** Pickles AC. Related Articles, Links

Vaccination of mares against equine herpesvirus-1.
Vet Rec. 1992 Feb 22;130(8):167-8. No abstract available.
PMID: 1314446 [PubMed - indexed for MEDLINE]

☐ **20:** Meyer H, Hubert PH. Related Articles, Links

Isolation and characterization of monoclonal antibodies against an attenuated vaccine strain of equine herpesvirus type 1 (EHV-1).
Vet Microbiol. 1988 Sep;18(1):95-101.
PMID: 2847404 [PubMed - indexed for MEDLINE]

Display Summary Show: 20 Sort Send to Text

Items 1-20 of 105 Page 1 of 6 Next

Jun 12 2003 10:19:17

L8: Entry 1 of 2 File: DWPI Feb 7, 2002

DERWENT-ACC-NO: 2002-206153
DERWENT-WEEK: 200238

TITLE: Novel mutant equine herpesvirus type-1 isolates having mutation in immediate early gene, useful in formulating vaccine compositions for preventing and treating equine herpesvirus type-1 infections in horses

INVENTOR: O'CALLAGHAN, D J

PRIORITY-DATA: 2000US-0626748 (July 27, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200209750 A2	February 7, 2002	E	068	A61K039/12
AU 200182997 A	February 13, 2002		000	A61K039/12

INT-CL (IPC): A61 K 39/12

ABSTRACTED-PUB-NO: WO 200209750A

BASIC-ABSTRACT:

NOVELTY - A mutant equine herpesvirus type-1 (EHV-1) isolate (I), in particular a replication-competent EHV-1 isolate comprising a mutation in the immediate-early (IE) gene of the viral genome, is new.

DETAILED DESCRIPTION - A mutant equine herpesvirus type-1 (EHV-1) isolate (I), in particular a replication-competent EHV-1 isolate comprising a mutation in the immediate-early (IE) gene of the viral genome, is new.

(I) comprises a mutation chosen from deletion mutations, Delta SRT1, Delta SRT2, d178/627, d552/897, d644/824; nonsense mutations n627, n951, n1029, n1411; insertion mutations in628, in1411; and point mutations D20N, D24N, L12P, L12E, F15D, E34Q.

INDEPENDENT CLAIMS are also included for the following:

(1) an immunogenic composition comprising (I);

(2) a vaccine composition comprising (I); and

(3) determining (II) the non-pathogenicity of an EHV-1 virus present in a horse subject previously administered with a non-pathogenic EHV-1 isolate comprising a mutation in the IE gene, by isolating the virus from the subject:

(a) detecting the presence of the mutant IE protein of the non-pathogenic isolate and the absence of a wild type IE protein in the virus; or

(b) detecting the absence in the serum of the subject of an antibody specific for the deleted portion for the IE protein; or

(c) detecting the absence of the wild-type IE nucleotide sequence and the presence of the mutant IE sequence; or

(d) determining the temperature sensitivity of the virus as identical to that of the

non-pathogenic EHV-1 isolate, to determine the virus as non-pathogenic.

ACTIVITY - Virucide; immunostimulant.

Mutant viruses KyAd644/824, KyAn1411, KyAin1411 and KyAE34Q were tested in mice. Mice were anesthetized with halothane and inoculated intranasally with 2 x 106 plaque forming units (PFU) of EHV-1 Kya or a mutant virus in a volume of 50 mu l. Control mice received 50 mu l of culture medium alone. Immunized mice were monitored daily for development of clinical signs of EHV-1 infection such as ruffled fur, loss of body weight, labored breathing, lethargy and huddling. No clinical disease was observed with mice infected with any of the four mutant viruses tested. To assess primary cytotoxic T lymphocyte (CTL) responses, lymphocytes were isolated from the mediastinal lymph nodes (MLN) 5 days postinoculation, and a single-cell suspension was obtained. Cytolytic activity was assessed. As indicated, all four mutant viruses tested, KyAd644/824, KyAn1411, KyAin1411 or KyAE34Q, induced a CTL response at a level similar to that induced by parent KyA virus.

MECHANISM OF ACTION - Vaccine.

USE - (I) is useful for stimulating an immune response, preferably a cell-mediated or humoral immune response, against EHV-1, and for preventing or inhibiting an EHV-1 infection in a horse (claimed).

ABSTRACTED-PUB-NO: WO 200209750A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.0/5

L10: Entry 1 of 6 File: DWPI Dec 28, 2002

DERWENT-ACC-NO: 2001-235161
DERWENT-WEEK: 200308

TITLE: Temperature-sensitive mutant of equine herpes virus-1, useful in live vaccines for treatment and prevention of infection by equine herpes viruses -1 and -4

INVENTOR: PATEL, J R

PRIORITY-DATA: 1999EP-0202933 (September 10, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
HU 200202738 A2	December 28, 2002		000	A61K039/245
WO 200117553 A1	March 15, 2001	E	020	A61K039/245
AU 200112711 A	April 10, 2001		000	A61K039/245
EP 1216054 A1	June 26, 2002	E	000	A61K039/245

INT-CL (IPC): A61 K 39/245; A61 K 39/27; C12 N 7/00; C12 N 7/06

ABSTRACTED-PUB-NO: WO 200117553A
BASIC-ABSTRACT:

NOVELTY - Temperature-sensitive (ts) mutants (A) of equine abortion virus (equine herpes virus (EHV)-1) deposited as ECACC V99061001, and its progeny, are new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a vaccine for prevention and/or treatment of EHV-1 infection in Equidae containing (A) and a carrier or diluent.

ACTIVITY - Antiviral.

MECHANISM OF ACTION - Induction of specific immune response.

29 Ponies with little or no level of neutralizing antibodies against EHV-1 were vaccinated intranasally with 5.3 log TCID50 of the ts-mutant TS C147, then 1 month later challenged with a field isolate of EHV-1. Five of 8 vaccinated animals showed brief, low level shedding of virus in the mucosa, one developed low level viremia (lasting 1 day), and none showed any increase in neutralizing antibody titers or development of pyrexia. All unvaccinated controls shed virus (at high level for 4-6 days), became viremic, showed an increase in neutralizing antibody titer and developed pyrexia.

USE - (A) are used to produce compositions, specifically vaccines, for prevention and/or treatment of EHV-1 infections, particularly in Equidae (e.g. horses, donkeys and zebras) but possibly also in cattle. EHV-1 causes abortion, neurological disease (paresis), upper respiratory tract infection and neonatal foal disease.

ADVANTAGE - (A) Replicates only in the upper respiratory tract of horses, producing little if any viremia. They are safe to use in pregnant mares, provide an adequate immune response and have limited capacity for transmission to other animals or reversion. They are also protective against diseases caused by EHV-4 (equine rhinopneumonitis virus).

WEST

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Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: HU 200202738 A2 WO 200117553 A1 AU 200112711 A EP 1216054 A1

L10: Entry 1 of 6 File: DWPI Dec 28, 2002

DERWENT-ACC-NO: 2001-235161
DERWENT-WEEK: 200308
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TITLE: Temperature-sensitive mutant of equine herpes virus-1, useful in live vaccines for treatment and prevention of infection by equine herpes viruses -1 and -4

INVENTOR: PATEL, J R

PRIORITY-DATA: 1999EP-0202933 (September 10, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
HU 200202738 A2	December 28, 2002		000	A61K039/245
WO 200117553 A1	March 15, 2001	E	020	A61K039/245
AU 200112711 A	April 10, 2001		000	A61K039/245
EP 1216054 A1	June 26, 2002	E	000	A61K039/245

INT-CL (IPC): A61 K 39/245; A61 K 39/27; C12 N 7/00; C12 N 7/06

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc | Image

☐ 2. Document ID: US 5434182 A

L10: Entry 2 of 6 File: DWPI Jul 18, 1995

DERWENT-ACC-NO: 1995-268292
DERWENT-WEEK: 199724
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TITLE: Prevention and treatment of bacterial condition - comprises admin of e.g. 6-14C fatty acid mono:glyceride(s) and/or 7-12 C fatty alcohol(s), opt. with blood enzyme lipase inhibitor

INVENTOR: HEIRD, W C; ISAACS, C E ; KIM, K S ; THORMAR, H ; WISNIEWSKI, H M

PRIORITY-DATA: 1992US-0896120 (June 10, 1992), 1987US-0140078 (December 31, 1987), 1989US-0365291 (June 12, 1989), 1990US-0543111 (June 25, 1990), 1993US-0058056 (May 3, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5434182 A	July 18, 1995		013	A61K031/22

INT-CL (IPC): A61 K 31/20; A61 K 31/22; A61 K 31/225

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 3. Document ID: WO 9514027 A1 AU 9481375 A

L10: Entry 3 of 6 File: DWPI May 26, 1995

DERWENT-ACC-NO: 1995-200336
DERWENT-WEEK: 199726

TITLE: New bis guanidine cpds., partic. hexoside derivs. - used as antiviral agents against human and domestic animal viruses, e.g. herpes, cytomegalovirus, varicella, Epstein-Barr, etc.

INVENTOR: RAKHIT, S; SLASSI, A

PRIORITY-DATA: 1994US-0153981 (October 16, 1994), 1993US-0153981 (November 17, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9514027 A1	May 26, 1995	E	041	C07H015/04
AU 9481375 A	June 6, 1995		000	C07H015/04

INT-CL (IPC): A61 K 31/155; A61 K 31/156; A61 K 31/44; A61 K 31/70; C07 C 279/16; C07 D 211/06; C07 H 15/04

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Clip Img | Image

☐ 4. Document ID: EP 643964 A2 US 6140371 A CA 2130291 A EP 643964 A3

L10: Entry 4 of 6 File: DWPI Mar 22, 1995

DERWENT-ACC-NO: 1995-116782
DERWENT-WEEK: 200057

TITLE: New uses for local anaesthetics - protects plasma cell membranes, reduces tumour size, also acts as an antidote to prevent intoxication, modulates immune function, etc.

INVENTOR: ELICABE, R L; KOLER, I ; LAGUENS, M ; MAHIQUES, J C ; PORTIANSKY, L ; KOLER, R I ; LAGUENS, R M ; PORTIANSKY, E L

PRIORITY-DATA: 1994US-0289706 (August 12, 1994), 1993US-0107888 (August 18, 1993), 1994US-0289503 (August 12, 1994), 1995US-0527503 (September 13, 1995), 1998US-0026541 (February 19, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 643964 A2	March 22, 1995	E	029	A61K031/16
US 6140371 A	October 31, 2000		000	A61K031/16
CA 2130291 A	February 19, 1995		000	A61K031/47
EP 643964 A3	August 9, 1995		000	A61K031/16

INT-CL (IPC): A61 K 31/16; A61 K 31/245; A61 K 31/445; A61 K 31/47

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 5. Document ID: US 5084271 A US 5084271 B1

L10: Entry 5 of 6 File: DWPI Jan 28, 1992

DERWENT-ACC-NO: 1992-056317
DERWENT-WEEK: 199737

TITLE: Vaccine for equine herpes virus type-4 and opt. type - comprising inactivated or attenuated live virus for protecting horses against rhinopneumonitis and opt. abortion

INVENTOR: STUDDERT, M J

PRIORITY-DATA: 1984AU-0008064 (November 9, 1984)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5084271 A	January 28, 1992		000	
US 5084271 B1	August 5, 1997		000	A61K039/245

INT-CL (IPC): A61K 39/12; A61K 39/23; A61K 39/245; A61K 39/27

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 6. Document ID: GB 2235875 A

L10: Entry 6 of 6 File: DWPI Mar 20, 1991

DERWENT-ACC-NO: 1991-082597
DERWENT-WEEK: 199112

TITLE: Use of 2-de:oxy-2-fluoro-cytidine - for treatment of influenza virus A and B

INVENTOR: TISDALE, S M; TUTTLE, J V

PRIORITY-DATA: 1989GB-0020535 (September 11, 1989), 1990GB-0019612 (September 7, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
GB 2235875 A	March 20, 1991		000	

INT-CL (IPC): A61K 31/50

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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Terms	Documents
equine abortion virus	6

Display Format: CIT Change Format

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WEST Search History

DATE: Friday, June 27, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT; PLUR=YES; OP=ADJ		
L18	equine abortion virus and temperature sensitive	2	L18
	DB=PGPB; PLUR=YES; OP=ADJ		
L17	equine abortion virus and temperature sensitive	0	L17
	DB=JPAB; PLUR=YES; OP=ADJ		
L16	equine abortion virus and temperature sensitive	0	L16
	DB=EPAB; PLUR=YES; OP=ADJ		
L15	equine abortion virus and temperature sensitive	0	L15
	DB=DWPI; PLUR=YES; OP=ADJ		
L14	Kit M.in.	12	L14
L13	equine abortion virus and temperature sensitive	1	L13
	DB=USPT; PLUR=YES; OP=ADJ		
L12	equine abortion virus and temperature sensitive	2	L12
L11	equine abortion virus	62	L11
	DB=DWPI; PLUR=YES; OP=ADJ		
L10	equine abortion virus	6	L10
L9	equine herpesvirus	12	L9
L8	equine herpesvirus and temperature	2	L8
L7	equine herpesvirus and temperature sensitive	0	L7
	DB=USPT; PLUR=YES; OP=ADJ		
L6	equine herpesvirus adj temperature sensitive	0	L6
L5	equine herpesvirus and temperature sensitive .clm.	9	L5
L4	equine herpesvirus and temperature sensitive adj 34	0	L4
L3	equine herpesvirus and temperature sensitive	50	L3
L2	equine herpesvirus.clm.	27	L2
L1	equine herpesvirus	219	L1

END OF SEARCH HISTORY

[redacted]

L3 ANSWER 4 OF 5 MEDLINE
AN 86291095 MEDLINE
DN 86291095 PubMed ID: 3016974
TI Molecular pathogenesis of equine coital exanthema: **temperature-sensitive** function(s) in cells infected with equine herpesviruses.
AU Jacob R J
NC AI 17620 (NIAID)
SO VETERINARY MICROBIOLOGY, (1986 Mar) 11 (3) 221-37.
Journal code: 7705469. ISSN: 0378-1135.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198609
ED Entered STN: 19900321
Last Updated on STN: 19970203
Entered Medline: 19860916
AB Preliminary experiments have revealed that several laboratory and wild-type strains of the **equine herpesvirus** (EHV) triad were **temperature-sensitive** for growth when assayed at 39 degrees C. The efficiencies of plating (EOP) observed were 10(-2) for both EHV 1 and 2, and 1 X 10(-6) for EHV 3. The EOPs were determined by plaque assays which compared titrations at 34 degrees C and 39 degrees C on equine fetal dermal fibroblast cells. Growth yield experiments, assayed at 34 degrees C, reflected those EOP's, but did not indicate any difference in yields when infected cultures were incubated at 34 degrees C and 37 degrees C. Temperature shift experiments with EHV 3-infected cultures revealed that a **temperature-sensitive** function(s) responsible for the reduction in titer appeared to be a late function(s). All strains examined appeared to incorporate H3-thymidine into viral-density DNA at the non-permissive temperature of 39 degrees C. Electron microscopy of EHV 3-infected cell cultures, incubated continuously at the non-permissive temperature and examined at 18 h after infection, revealed structures consistent with the accumulation of nucleocapsids within the nucleus. The evidence presented is consistent with the hypothesis that in equine dermal cells infected with a plaque-purified wild-type strain of EHV 3 (1118LP), a function needed for the egress of nucleocapsids from the nucleus is absent at 39 degrees C. The significance of these findings relative to the pathogenicity of the disease (equine coital exanthema) caused by this virus is discussed.
CT Check Tags: Animal; Support, U.S. Gov't, P.H.S.
Cell Line
Centrifugation, Density Gradient
Cercopithecus aethiops
Cytopathogenic Effect, Viral
DNA, Viral: BI, biosynthesis
*Herpesviridae: GD, growth & development
*Herpesvirus 1, Equid: GD, growth & development